



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/515,978	02/25/2000	Gerald M. Benson	55250USA1A	9164
32692	7590	04/13/2004	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			CHEVALIER, ALICIA ANN	
PO BOX 33427			ART UNIT	PAPER NUMBER
ST. PAUL, MN 55133-3427			1772	20
DATE MAILED: 04/13/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/515,978	BENSON ET AL.
Examiner	Alicia Chevalier	Art Unit 1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 06 October 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 9-14, 16-37 and 40 is/are pending in the application.
4a) Of the above claim(s) 9-14 and 24-37 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 16-23 and 40 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

RESPONSE TO AMENDMENT

1. Claims 9-14, 16-37 and 40 are pending in the application, claims 9-14 and 24-37 are withdrawn from consideration. Claims 1-8, 15, 38 and 39 have been cancelled.
2. Amendments to claims in paper 19, filed on October 6, 2003, have been entered in the above-identified application.

REJECTIONS REPEATED

3. The 35 U.S.C. §102 rejection of claim 40 as anticipated by Bacon, Jr. et al. (US Patent No. 5,614,286) is repeated for reasons previously of record in paper #9, mailed January 2, 2003, page 2, paragraphs #6.
4. The 35 U.S.C. §102 rejection of claims 16-23 and 40 as anticipated by Nilsen et al. (5,657,162) is repeated for reasons previously of record in paper #6, mailed May 9, 2002, page 4, paragraph #8 and paper #9, page 2, paragraphs #6.

ANSWERS TO APPLICANT'S ARGUMENTS

5. Applicant's arguments in paper #19 regarding the 35 U.S.C. 102 rejection of claim 40 over Bacon of record have been carefully considered but are deemed unpersuasive. Applicant argues that Bacon fails to disclose a machined substrate, a method of making a machined substrate, and the combination of a machined substrate with a replicated substrate. First, claim 40 does not claim the method of making a machined substrate. Furthermore, the method of forming the product is not germane to the issue of patentability of the product itself.

MPEP 2113. Second, Applicant has not given a definition to the term “machined substrate” in the Glossary of terms in the specification starting page 26. Claims must be given their broadest reasonable interpretation in light of the specification. MPEP 2111. Since Applicant has not given a definition to the term “machined substrate,” it is given its broadest reasonable interpretation of a substrate made by a machine. Bacon discloses the cube corner retroreflective sheeting is made by using a mold (*Bacon col. 3, line 65 through col. 4, line 19*), i.e. the sheeting is made by a machine and is thus a machined substrate.

6. Applicant’s arguments in paper #19 regarding the 35 U.S.C. 102 rejection over Nilsen of record have been carefully considered but are deemed unpersuasive.

Applicant argues that Nilsen fails to teach a machined substrate. As stated above, giving the term “machined substrate” its broadest reasonable interpretation, the term taken to mean a substrate made by a machine. Nilsen discloses that the metallic layer, Applicant’s claimed “machined substrate,” is vacuum deposited of otherwise treated to selectively form transparent reflective metallic deposits on the surface of the microprism, Applicant’s claimed “replicated substrate,” formations leaving some prisms uncoated (*Nilsen col. 2, lines 45-49*). Therefore, since the metallic layer is formed by a machine that can vacuum deposit the layer on the microprisms, it is a machined substrate.

Applicant further argues that both Bacon and Nilsen do not show the presence of a transition line. The transition line is a line or other elongated feature that separates constituent faces of a compound face (*see specification page 28, lines 25-26*). In other words the transition line is the invisible line created at the point where the machined substrate face of the cube corner

element meets the replicated substrate face of the cube corner. Bacon shows the transition line in figure 1 and Nilsen show it in figure 2.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ac

3/29/04




HAROLD PYON
SUPERVISORY PATENT EXAMINER


3/31/04